UNITED STATES DISTRICT COURT DISTRICT OF MASSACHUSETTS

UNITED STATES OF AMERICA)	
)	
v.)	Criminal No. 13-10200-GAO
)	
DZHOKHAR TSARNAEV,)	UNDER SEAL
Defendant	j	

GOVERNMENT'S OPPOSITION TO DEFENDANT'S MOTION TO EXCLUDE TESTIMONY REGARDING CELLPHONE GEOLOCATION EVIDENCE AND REQUEST FOR DAUBERT HEARING

The United States, by and through undersigned counsel, respectfully submits this opposition to Tsarnaev's motion to exclude testimony regarding cell phone geolocation evidence.

INTRODUCTION

In an August 1, 2014, letter (attached hereto as "Exhibit A"), the government disclosed to Tsarnaev that FBI Special Agent Chad Fitzgerald will testify (1) about the mechanics of cellular telephone communications and the use of cell phone call data to determine the general geographic location of a phone at a specific time, (2) that cell phone call data place Tsarnaev and his brother's phones in close proximity to the Boston Marathon bombings at the time the bombings occurred, and (3) that cell phone call data place Tsarnaev and his brother's phones at other particular locations before and after the bombings.

Special Agent Fitzgerald is eminently qualified to give this testimony. He has been employed by the FBI since 1996 and has successfully used cellular telephone analysis to locate individuals or corroborate their testimony in hundreds of cases. Before 1996 he spent several years working as an engineer and received both B.S. and M.S. degrees in electrical engineering. He has been certified and trained extensively in various cellular protocols and by U.S.-based cellular companies. He has in turn trained thousands of other investigators and agents in

telephone records analysis, and has been qualified as an expert in cellular record telephone analysis.

ARGUMENT

A. The government's August 1, 2014, disclosure letter complied with Fed. R. Crim. P. 16(a)(1)(G) and Fed. R. Evid. 702, and, as numerous courts have found, Special Agent Fitzgerald's methodology satisfies *Daubert*'s reliability test.

Tsarnaev claims that the government's August 1, 2014, disclosure letter omits "certain of Agent Fitzgerald's underlying opinions" [Deft. Mot. at 3] along with the bases for them, in violation of Fed. R. Crim. P. 16(a)(1)(G) and FRE 702, but he cites only one such opinion that supposedly is missing: "[his opinion as to] why a particular phone may use one or more specific towers during a particular call." [Deft. Mot. at 3]. More specifically, Tsarnaev argues that Special Agent Fitzgerald will necessarily opine "that a cell phone call must necessarily utilize the nearest tower and that the individual making the call must therefore be within a certain geographic range [of that tower]" [Deft. Mot. at 4], but the government omitted that opinion -- along with the basis for it -- from its disclosure.

Tsarnaev is mistaken. Special Agent Fitzgerald will not opine that a cell phone call necessarily utilizes the nearest tower. Rather, as is clearly spelled out in the government's disclosure, Special Agent Fitzgerald will begin with a record of the *actual tower* that was utilized by a particular cell phone call, and will identify, based on that tower's location and the particular 120-degree sector of the tower that was utilized, the general area in which the phone was located when it initiated the call. Thus, for example, as stated in the government's disclosure letter, he will testify that contemporaneous "call detail records (CDR) . . . show that the users of 857-928-4634 and 617-286-9151 were in close proximity to the Boston Marathon bombing at the time"

the bombings took place. He will testify that that is true regardless of whether the phones utilized the nearest tower.

Courts routinely allow expert testimony about the general location of phones based on call records showing the actual towers and sectors utilized during particular calls. See, e.g., United States v. Carpenter, 2013 WL 6385838, at *6 (E.D. Mich. Dec. 6, 2013); United States v. Eady, 2013 WL 4680527, at *3-5 (D.S.C. Aug. 30, 2013); United States v. Machado-Erazo, 950 F. Supp. 2d 49, 55-56 (D.D.C. 2013); United States v. Reynolds, 2013 WL 2480684, at *3-5 (E.D. Mich. June 10, 2013); United States v. Davis, 2013 WL 2156659, at *6-7; United States v. Jones, 918 F. Supp. 2d 1, 5 (D.D.C. 2013); United States v. Fama, 2012 WL 6102700, at *3–4 (E.D.N.Y. Dec. 10, 2012); United States v. Allums, 2009 WL 806748, at *2-3 (D.Utah Mar. 24, 2009); United States v. Weathers, 169 F.3d 336, 339 (6th Cir. 1999). Courts also have expressly found such expert testimony to meet Daubert's reliability test. See, e.g., United States v. Schaffer, 439 F. App'x 344, 346-47 (5th Cir. 2011) (affirming admission of FBI analyst's geolocation methodology in part because the FBI had used the methodology successfully at least 1,000 times); Allums, 2009 WL 806748, at *2 (finding geolocation methodology reliable because it has been "utilized in hundreds of prior investigations, allowing the FBI to use cell tower data to successfully track and apprehend fugitives" and "therefore [has] been tested, and has general acceptance in the area of law enforcement."). In light of the many cases recognizing the reliability of geolocation testimony based on cell tower and sector location, many courts have repeatedly stated that this type of testimony "clears the hurdle imposed by Daubert and Rule 702." Machado-Erazo, 950 F. Supp. 2d at 56; accord Davis, 2013 WL 2156659, at *4-5 (finding 120-degree pie shape method to be "very, very accurate").

The argument Tsarnaev makes in his motion has been made and rejected many times before. See, e.g., United States v. Rosario, 2014 WL 6076364, at *2 (S.D.N.Y. Nov. 14, 2014) (noting that defendant's assertion that the "[expert's] method is premised on the assumption that a cell phone will always connect to the tower closest to it . . . is simply incorrect . . . and has been considered and rejected by other courts"); accord Machado-Erazo, 950 F. Supp. 2d at 55-56. In Machado-Erazo, the defendant filed a motion to exclude expert testimony on cellular telephone analysis, alleging the testimony to be both unreliable and prejudicial because the government presumed "that a cell phone always connects to the closest cell tower at the time a call is placed." Id. at 55. The court found this assertion to be "fundamentally erroneous" because the agent's testimony was in fact based on conclusions about the likely area from which a call is made using a 120-degree pie shape anchored to a specific antenna and cell tower. Id. at 55-56. The situation here is exactly the same. Special Agent Fitzgerald will base his opinions about the general location where a phone was at the time it made a particular call by using a 120-degree pie shape anchored to the specific antenna and cell tower utilized by that call. In short, his methodology is exactly the one that has been upheld numerous times against FRE 702 and Daubert challenges.

B. Testimony about the location of Tsarnaev's phone in the days before and after April 15, 2013, is relevant and more prejudicial than probative.

Tsarnaev's does not spell out the basis for his Rule 401, 402, and 403 challenges, but he appears to argue that unless the government identifies in advance the date, time, and location of each call made by Tsarnaev's phone, and explains in advance why the presence of the phone at each location at the corresponding time is relevant, the Court must presume that the information is irrelevant and that its probative value is outweighed by the risk of unfair prejudice. That is obviously not the law. The government is not legally obligated to identify in advance each and every fact it intends to prove at trial on pain of having the evidence of those facts ruled irrelevant

and unfairly prejudicial in limine. Normally, the time to make Rule 401 and 403 objections is the time when the evidence is offered, so the Court can determine the question of admissibility in context. There are exceptions to that general rule, but this plainly is not one of them.

Nevertheless, in the spirit of transparency -- and to facilitate admissibility rulings by the Court during the trial -- the government is providing to Tsarnaev detailed evidence about the date, time and location of particular calls it intends to offer testimony about at the trial. The government reserves the right to offer testimony about additional calls during the trial.

C. There is no need for a *Daubert* hearing.

A trial court has "latitude . . . to decide whether or when special briefing or other proceedings are needed to investigate reliability." <u>Kumho Tire v. Carmichael</u>, 526 U.S. 137, 152 (1999). Thus, it is well established that "[a]lthough the [<u>Daubert</u>] Court stated that the inquiry is a 'preliminary' one, to be made 'at the outset,' this does not mean that it must be made in a separate, pretrial hearing, outside the presence of the jury." <u>United States v. Diaz</u>, 300 F.3d 66, 74 (1st Cir. 2002) (citations omitted); <u>see also United States v. Nichols</u>, 169 F.3d 1255, 1262-64 (10th Cir. 1999) (trial court has discretion not to hold pretrial evidentiary reliability hearing in carrying out its gatekeeping function under <u>Daubert</u>); <u>United States v. Alatorre</u>, 222 F.3d 1098, 1100 (9th Cir. 2000) (district courts are not required to hold a <u>Daubert</u> hearing before ruling on the admissibility of scientific evidence).

Because numerous courts have already found Special Agent Fitzgerald's method for geolocating phones using cell-site date to be reliable, federal courts routinely reject requests for corresponding <u>Daubert</u> hearings. <u>See</u>, <u>e.g.</u>, <u>Jones</u>, 918 F. Supp. 2d at 7; <u>Reynolds</u>, 2013 WL 2480684, at *5. Tsarnaev's arguments about the usefulness of Special Agent Fitzgerald's testimony go only to its weight, not its admissibility -- a consideration that "the court's [<u>Daubert</u>]

gatekeeping function does not extend to." <u>Eady</u>, 2013 WL 4680527, at *5; <u>see also Fama</u>, 2012 WL 6102700, at *4 ("[Defendant's] objections concern the weight of [the expert's] testimony, and it is the province of the jury to decide what weight, if any, to give such testimony.")

WHEREFORE, the government respectfully requests that the Court deny Tsarnaev's motion to exclude Special Agent Fitzgerald's testimony or, in the alternative, for a <u>Daubert</u> hearing.

Respectfully submitted,

CARMEN M. ORTIZ United States Attorney

By: /s/ Aloke S. Chakravarty
ALOKE S. CHAKRAVARTY
WILLIAM D. WEINREB
NADINE PELLEGRINI
Assistant U.S. Attorneys

CERTIFICATE OF SERVICE

I hereby certify that this document will be served via electronic mail to Judy Clarke, Esq., counsel for Dzhokhar Tsarnaev, on December 19, 2014.

/s/ William D. Weinreb WILLIAM D. WEINREB